



NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.

Should New Zealand fight Climate Change? – A Doubting View

Joint ISCR/IPS Debate,
Victoria University of Wellington,
15 April 2008

Richard Meade

Research Principal, ISCR

Principal, Cognitus Advisory Services Limited

Teaching Fellow, Victoria University of Wellington

richard.meade@cognitus.co.nz

CORPORATE MEMBERS

Contact Energy Ltd

Fonterra Co-operative

Dairy Group Limited

Meridian Energy

Powerco

Telecom Corporation
of New Zealand Ltd

Transpower New Zealand Ltd

Vector Ltd

Victoria University of Wellington

Westpac Institutional Bank

Introduction

- Take the science of climate change and the need for an international response to climate change as givens → focus only on New Zealand
- In just 15 minutes, question whether:
 - Climate change is uniformly bad for New Zealand
 - New Zealand can fight climate change
 - New Zealand should fight climate change
 - New Zealand can influence those who can fight climate change
 - New Zealand stands to benefit from fighting climate change



Is Climate Change All Bad for New Zealand?

- NIWA's negative scenarios get most of the airplay, but what about:
 - Longer growing seasons for agriculture and forestry in the south and west
 - Better inflows for hydro generation
 - Warmer winters with less related deaths, and reduced demands on electricity system
 - Increased pine forest growth in the south and west
 - More widespread winegrowing, and better reds ...
 - Karori becoming prime coastal property ...
- Importantly, gradual and considered adaptation will both mitigate adverse impacts and create opportunities

In short, there is good news as well as bad news



NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.

Is Climate Change All Bad for New Zealand?

What does an extra 3°C look like ...

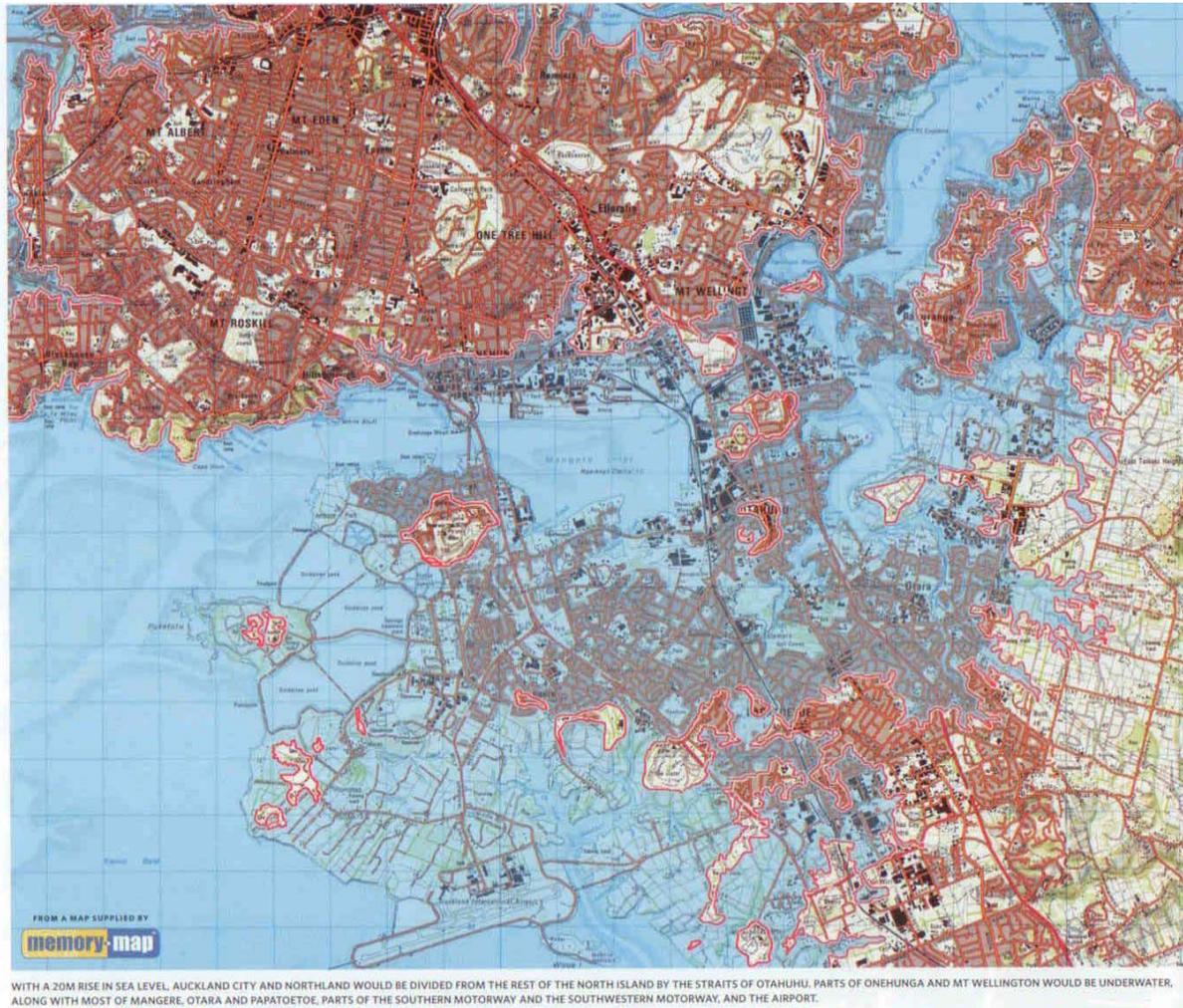
Where	+3°C means same average temperature as	+3°C makes July look like
Invercargill	Blenheim	September
Dunedin	Wanganui	Late August
Christchurch	Auckland	September
Wellington	Kaitia	Late August
Auckland	Sydney	Late September

Sources: NIWA for New Zealand average temperatures, [www. Eurometeo.com](http://www.eurometeo.com) for Sydney

Ecosystem changes may well result, but not always bad ones, and perhaps even better ones might arise (particularly if adaptation is assumed)



Is Climate Change All Bad for New Zealand?



Source: *Metro*, January/February 2008, p. 71



**NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.**

Can New Zealand Fight Climate Change?

Highest CO₂ Emitting Power Plants in the World



Icons Explained



Red Alerts

A large red circle indicates that a plant produces a lot of electricity and a lot of CO₂.



Clean & Green

A large green circle indicates that a plant produces a lot of electricity and almost no CO₂.

Icon Properties



Power Plant



Power Company



Geographic Region

Dirty



Clean

Lots of Energy



Little Energy

Learn More: [About CARMA](#) | [Our Partners](#) | [FAQs](#)

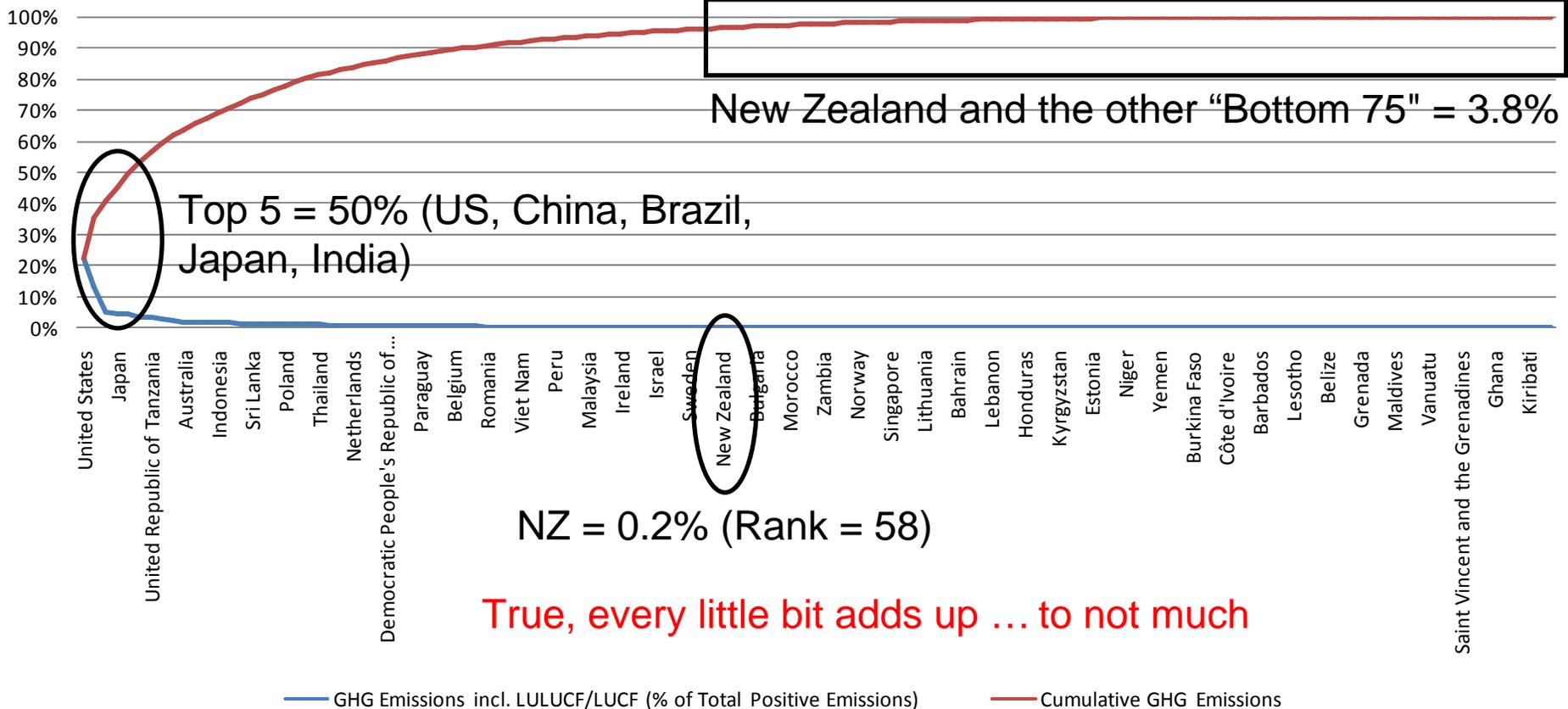
Source: www.carma.org



NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.

Can New Zealand Fight Climate Change?

Total and Cumulative GHG Emissions by Country



Source: www.unfccc.int



NEW ZEALAND INSTITUTE FOR THE STUDY OF COMPETITION AND REGULATION INC.

Can New Zealand Fight Climate Change?

- If New Zealand were to disappear overnight it would take China less than 2 months to build enough new coal-fired power stations to replace our annual emissions
- Beijing alone gets 1,000 new cars every day – it would take 7 years for Beijing's new cars to equal New Zealand's entire fleet
- Simon Upton: “Only the United States, the EU, China and a handful of other countries can solve [the climate change challenge]” (*Dominion Post*, 11/3/08, p. B5)
- General secretary of UNFCCC: “To design a long-term response to climate change that does not include the world's largest emitter and largest economy [the US] just would not make any sense” (*Dominion Post*, 4 December 2007, p. B2)

Does the climate even know that New Zealand exists???

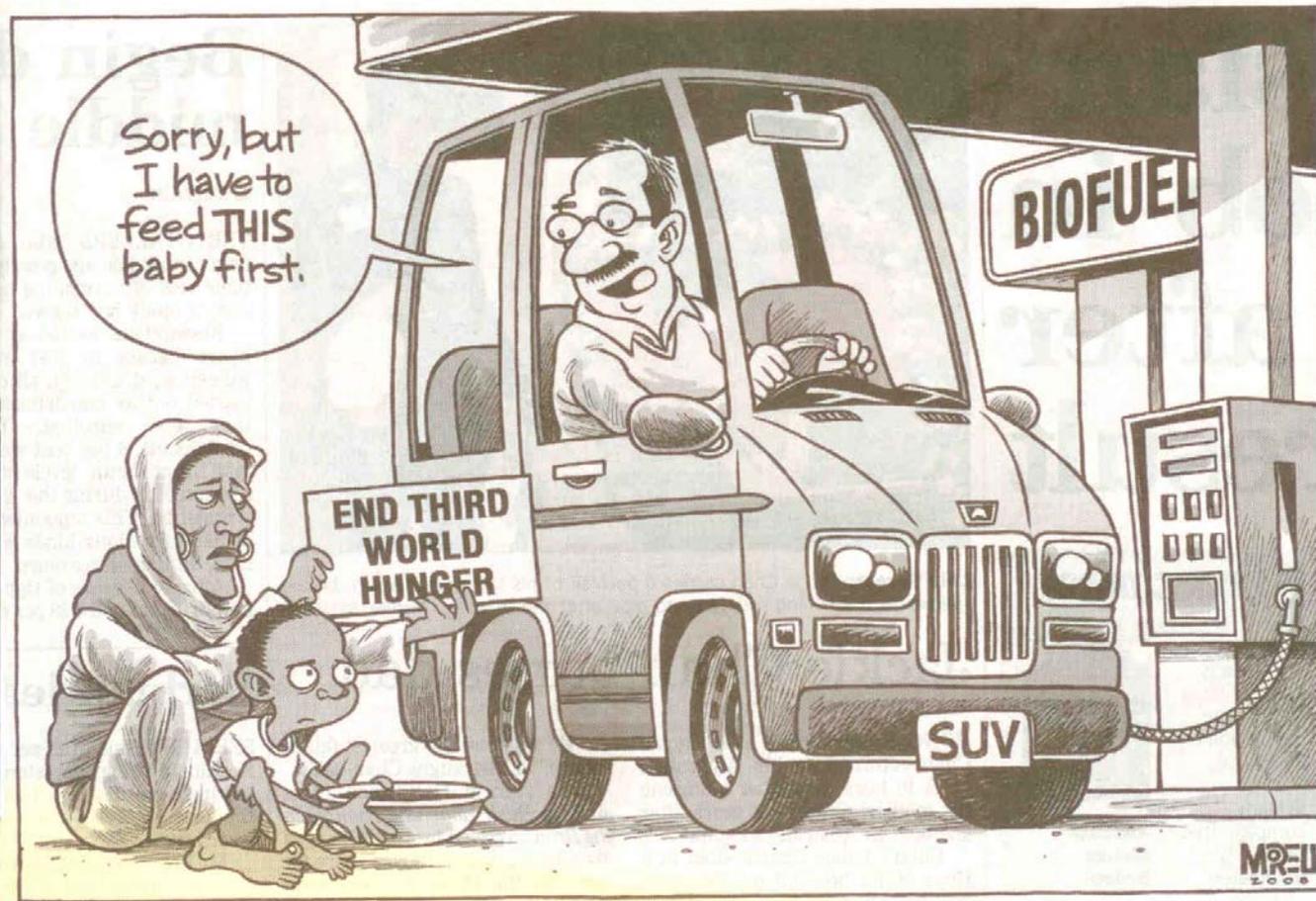


Should New Zealand Fight Climate Change?

- First to the ethical/altruistic considerations:
 - Because we are “rich” we ought to do something:
 - Only if we have something to do (cf 0.2%), and by the way, we are only 27th in the world for GDP per capita (at just 29% of Luxembourg’s)
 - Because our emissions per capita are high:
 - So were Robinson Crusoe’s – would the climate or anybody else gain anything by him reducing them?
 - Because it is the right thing to do:
 - Is it right or just empty if it is also futile?
 - What if New Zealand’s ETS just shows China the economic costs of fighting climate change without demonstrating any benefits?



Should New Zealand Fight Climate Change?



Source: *Dominion Post*, 10 March 2008

The ethical considerations are neither clear cut, nor one way



NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.

Should *New Zealand* Fight Climate Change?

- Next to the selfish considerations:
 - Our tradable sectors (agriculture, tourism, airlines) need to beat off “food miles” and “air miles”
 - But should low-income Maori face relatively higher power bills than low-income non-Maori under the ETS so that Fonterra’s farmers can enjoy a branding advantage in Britain?
 - Why can’t just those sectors exposed to New Zealand’s emissions pay the full costs of their own emissions without everybody else also paying?

Important distributional questions



Should *New Zealand* Fight Climate Change?



10 native trees funded for every new Honda sold. 280,000 trees and counting...

In 2004 Honda New Zealand created the TreeFund with the idea to assist in the restoration of local bio-diversity. It has proven rather successful with funding accumulated for a veritable forest of over 280,000 trees so far. Trees are planted in association with regional councils around the country. Add to this low emission engine technology and world leading fuel efficiency and you'll get an idea of Honda's commitment to guiding the car industry into a more environmentally conscious age.

Visit www.honda.co.nz/environment to discover more.



Source: *Time*



**NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.**

Should *New Zealand* Fight Climate Change?



NEWS AND INFORMATION

Taking care of the environment too!

Air New Zealand's domestic travel revolution isn't just about customer comfort. We're also leading the way in developing more environmentally friendly fuel for commercial aircraft.

Air New Zealand CEO Rob Fyfe recently signed a memorandum of understanding with Boeing and Rolls Royce to work on projects ensuring that commercial aviation becomes more environmentally sustainable.

The first step will be the commercial trial of a bio-fuelled, Rolls Royce powered, Boeing aircraft in the second half of next year or early 2009. The Boeing 747 flight, which is likely to depart Auckland, will not carry customers and will be conducted under strict safety standards.

Only one engine will run on a blended bio fuel/kerosene mix and the remaining three will be powered by regular aviation fuel. The test flight will mark another step in Air New Zealand's plan to lead the aviation industry in developing the most environmentally responsible airline practices in the world.

It's hard to believe that, as little as a year ago, bio fuel seemed like pie in the sky to many aviation industry observers. However, technology is moving so fast that it may become viable in a much shorter timeframe than previously thought. We're pleased to play our part in making it a reality sooner rather than later.

} Bold goal

Source: *Koru Review*, November 2007

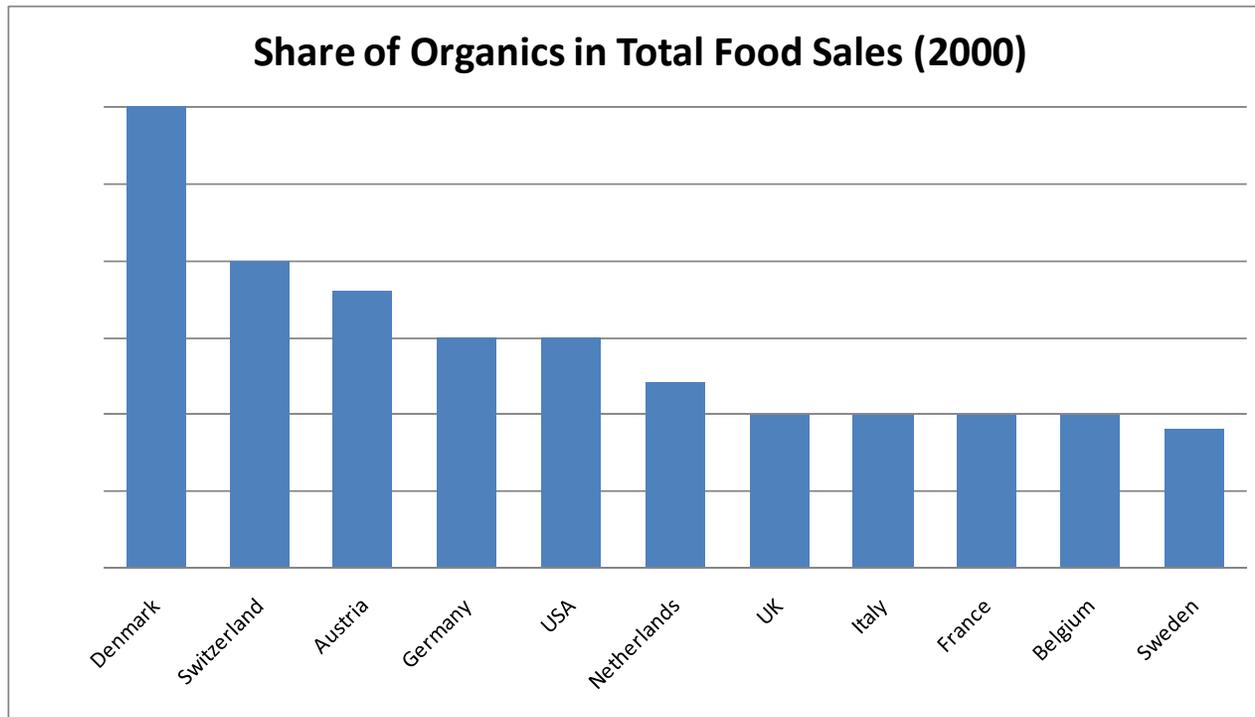
Plus voluntary carbon offsets costing up to \$88 for Auckland/LA



NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.

Should New Zealand Fight Climate Change?

How “green” are consumers anyway ...

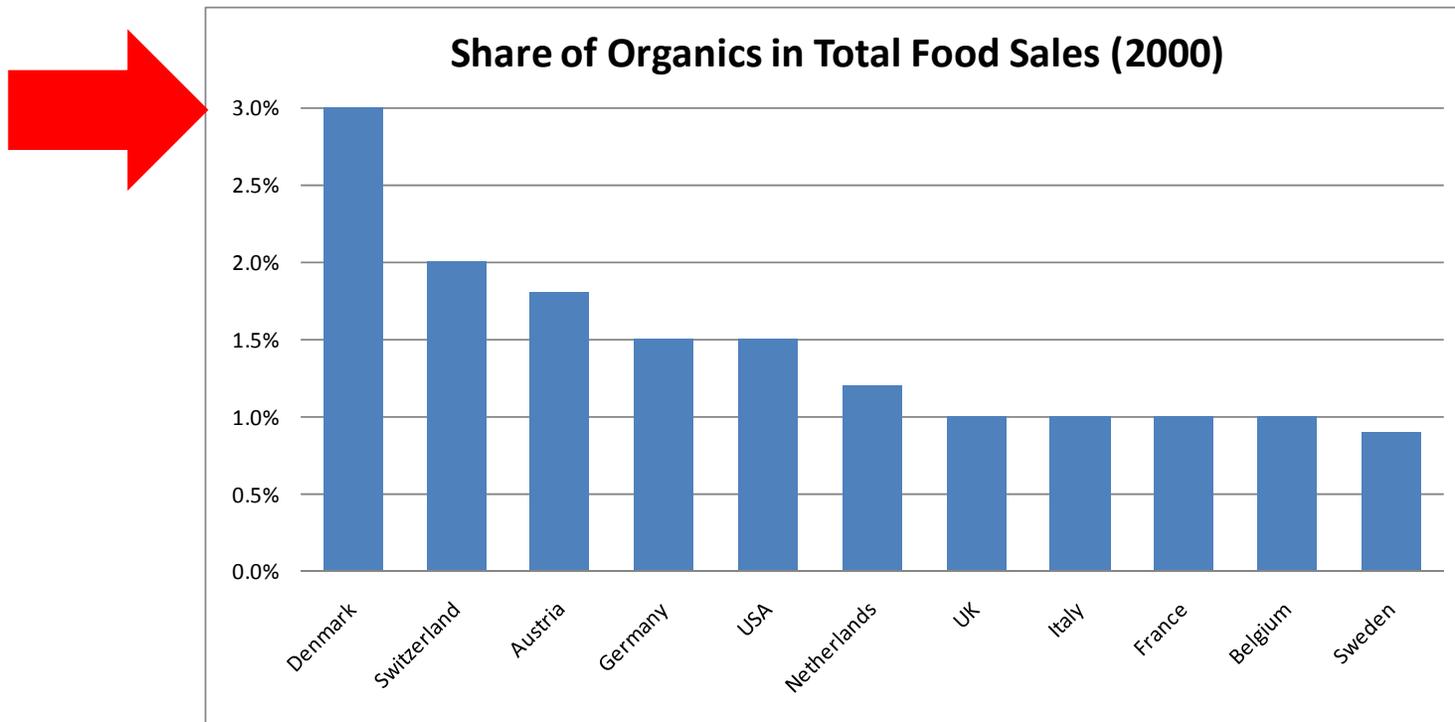


Source: *World Markets for Organic Fruit and Vegetables*, FAO, 2001



Should New Zealand Fight Climate Change?

But look at the numbers ...



Plus: UK research commissioned by the NZ government reported that about two thirds of British consumers knew about “food miles”, but half were unconcerned about which country their food came from (and the concept has not made inroads into Continental Europe)

Let's not get too worked up, at least not just yet



NEW ZEALAND INSTITUTE FOR THE STUDY
OF COMPETITION AND REGULATION INC.

Can New Zealand Influence the Polluters?

- New Zealand can lack diplomatic leverage on substance, but box above its weight on process → maybe we can get stuff done?
- Our “nuclear free” policy hasn’t stopped proliferation – indeed, New Zealand’s stance could now be on the wrong side of the debate
- China – pollution costs annually amount to 10% of GDP (*Economist*, 15/3/08, p. 13)
- US – American Climate Security Act (ACSA) – including tariffs on imports from countries that do not price emissions (trade war with climate benefits?)
- If “peak oil” is true, won’t that help fix the problem?

The big players will fight climate change when it is in their interest to do so → Can we really change that?



Won't New Zealand Gain by Fighting CC?

- Not if it fails to stop adverse climate change, or succeeds in stopping the benefits of climate change
- There may be branding advantages for companies to go green → let them pay for it, they keep the benefits
- As a nation we might “feel good” by fighting climate change → we should let people vote with their cheque books
- Some core sectors face considerable downside from the ETS (e.g. pre-1990 foresters)

Big distributional questions once again, and considerable scope for people/firms to work out their own solutions for their own benefit



Does Any of This Matter?

- New Zealand has committed to an ETS, like it or not
- How that ETS evolves, however, should reflect realities rather than rhetoric
- Given the distributional consequences of New Zealand's approach, we should expect ongoing debate
- We can probably adapt to irreversible climate change policy as much as we can to irreversible climate change
- Given the possible benefits to New Zealand of climate change, and our relative inability to directly influence the climate (or those who do influence the climate), we should be circumspect in formulating our response

You have heard two sets of views → You decide!

